

Appln. No. 10/667,014
Amendment dated June 14, 2005
Reply to Office Action of March 31, 2005

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Canceled)
2. (Canceled)
3. (Canceled)
4. (Canceled)
5. (Canceled)
6. (Canceled)
7. (Canceled)
8. (Canceled)
9. (Canceled)
10. (Canceled)
11. (Canceled)
12. (Canceled)
13. (Canceled)
14. (Canceled)
15. (Canceled)
16. (Canceled)
17. (Canceled)
18. (Canceled)

Appln. No. 10/667,014
Amendment dated June 14, 2005
Reply to Office Action of March 31, 2005

19. (Canceled)

20. (Canceled)

21. (Canceled)

22. (Canceled)

23. (Canceled)

24. (Canceled)

25. (Canceled)

26. (Canceled)

27. (Canceled)

28. (Canceled)

29. (Canceled)

30. (Canceled)

31. (New) The method of forming an electric motor, comprising the steps of:

forming a plurality of arcuate stator segments, each segment having a concave surface, a convex surface, opposite end surfaces, and a plurality of teeth extending inwardly from said concave surface;

providing each segment with an electrical winding having different portions that are arranged adjacent said concave, convex and end surfaces, said winding being adapted to be selectively energized to form a three-dimensional magnetic field about said winding;

assembling said segments to form an annular stator; and

placing a rotor within said stator, said stator having at least two magnetic poles that are

Appln. No. 10/667,014
Amendment dated June 14, 2005
Reply to Office Action of March 31, 2005

arranged to interact with the magnetic field in said stator.

32. (New) The method as set forth in claim 31 wherein said segments are formed by compacting at least one powdered metallic material.

33. (New) The method as set forth in claim 32 wherein said segments are formed by a dynamic magnetic compaction technique.

34. (New) The method as set forth in claim 31 wherein said winding is embedded within the associated stator segment.

35. (New) The method as set forth in claim 31 wherein said winding is mounted on the associated stator segment.

36. (New) The method as set forth in claim 31 wherein said rotor has a permanent magnet, and wherein said magnetic poles on said rotor are created by the poles on said magnet.